

# Semantic Expressiveness and RPG-Dev-Wiki

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# The RPG-Dev-Wiki Plattform

- Tool for designing *Role Play Games* (RPGs)
- Bundle of about 800 wiki pages  
Templates, Property definitions, categories, help pages
- Uses MW, SMW & many other extensions  
including several RPG-Dev tailored extensions
- Extensive documentation with best practice
- Currently, only available in German



<http://rpg-dev.org>

- Repo for ongoing development of the system
- Went online in early 2010
- Host for actual projects (RPG-Dev-Wiki Clients)  
E.g. <http://gom.rpg-dev.org> (‘Gothic Open Mod’ project)



# RPG-Dev-Wiki Basics

- Templates for describing game contents  
e.g. NPCs, Locations, Quests, etc.
  - Usually one per wiki page
  - The RPG-Dev-Wiki System is all about managing their relations
- Everything is work in progress
  - Lots of the content is very likely to be changed several times, redundancies can be very expensive
  - The RPG-Dev-Wiki System is all about avoiding those redundancies

**This can't be enforced. Authors have to follow certain guidelines. They should know about and use the provided technology.**

# Semantic Expressiveness (SemEx)

- Originally developed for RPG-Dev-Wiki  
New, short syntax/*parser function* for inline queries

**<?Property :: Page>**

or

**{ { ? : Property | of=Page } }**

# Semantic Expressiveness (SemEx)

- Originally developed for RPG-Dev-Wiki
  - New, short syntax/*parser function* for inline queries
    - Against redundancy in article text (flowing text)
    - Ensures “**expressive result**”

```
{ {NPC  
| Name = Peter  
| Gender = male  
| Age = 42 years  
...  
}}
```

```
<?Name> is the reigning king of  
<?Name::Kingdom>. Ever since he  
has turned <?Age>, he...
```

Peter is the reigning king of  
Caldera. Ever since he has  
turned 42 Years , he...

Peter is the reigning king of  
<Name of Kingdom>. Ever  
since he has turned <Age>,  
he...

# Semantic Expressiveness (SemEx)

Also,

`<?Name>` is the  
reigning king of  
`<?Name::Kingdom>`.  
Ever since he has  
turned `<?Age>`,  
he...

VS.

`{{#show:{{PAGENAME}}|?Name}}`  
is the reigning king of  
`{{#show:Kingdom|?Name}}`.  
Ever since he has turned  
`{{#show:{{PAGENAME}}|?Age}}`,  
he...

Peter is the reigning king of  
`<Name of Kingdom>`. Ever  
since he has turned `<Age>`,  
he...

VS.

Peter is the reigning king of .  
Ever since he has turned , he...

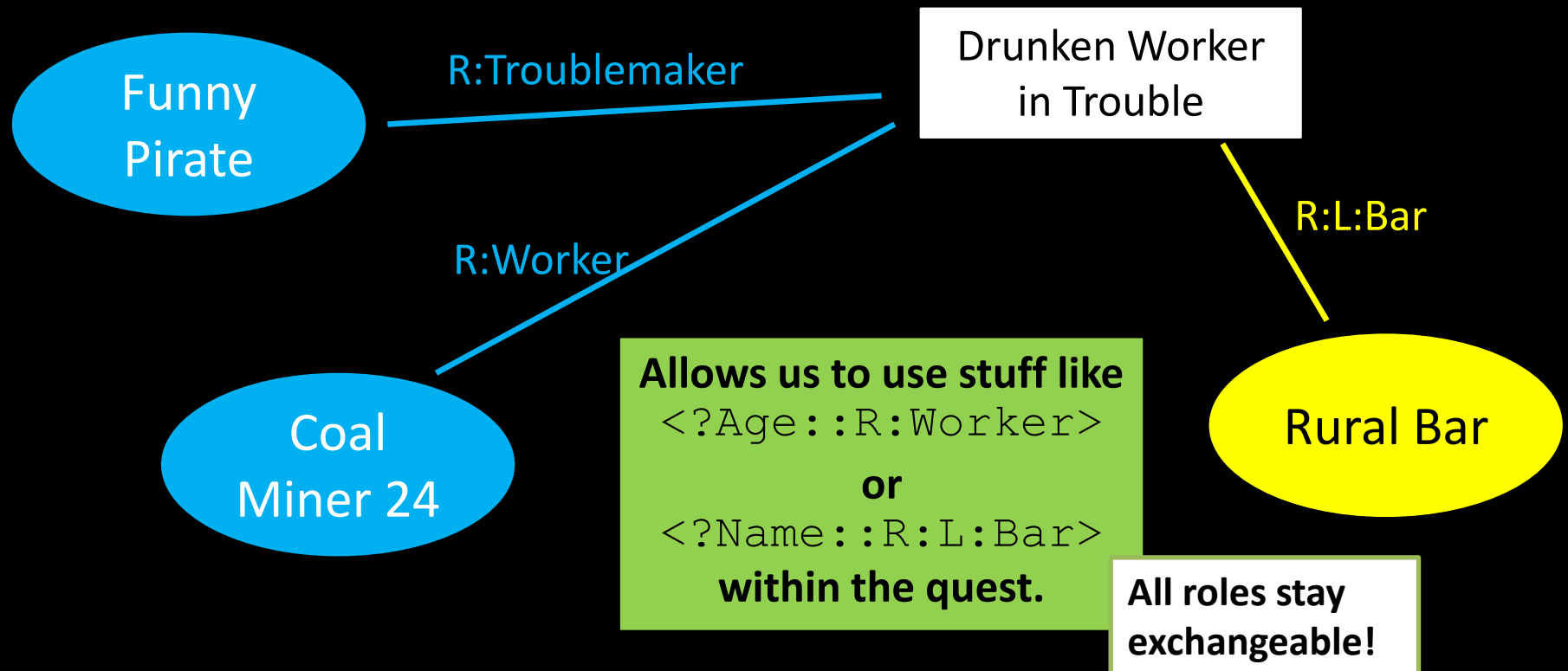
# SemEx in RPG-Dev-Wiki (1)

- RPG-Dev-Wiki Documentation encourages to name articles in a descriptive way
  - Sequential IDs (prefixed) might be useful sometimes
  - Having redundant information in the name can be useful in some rare cases
  - A good balance serves the workflow

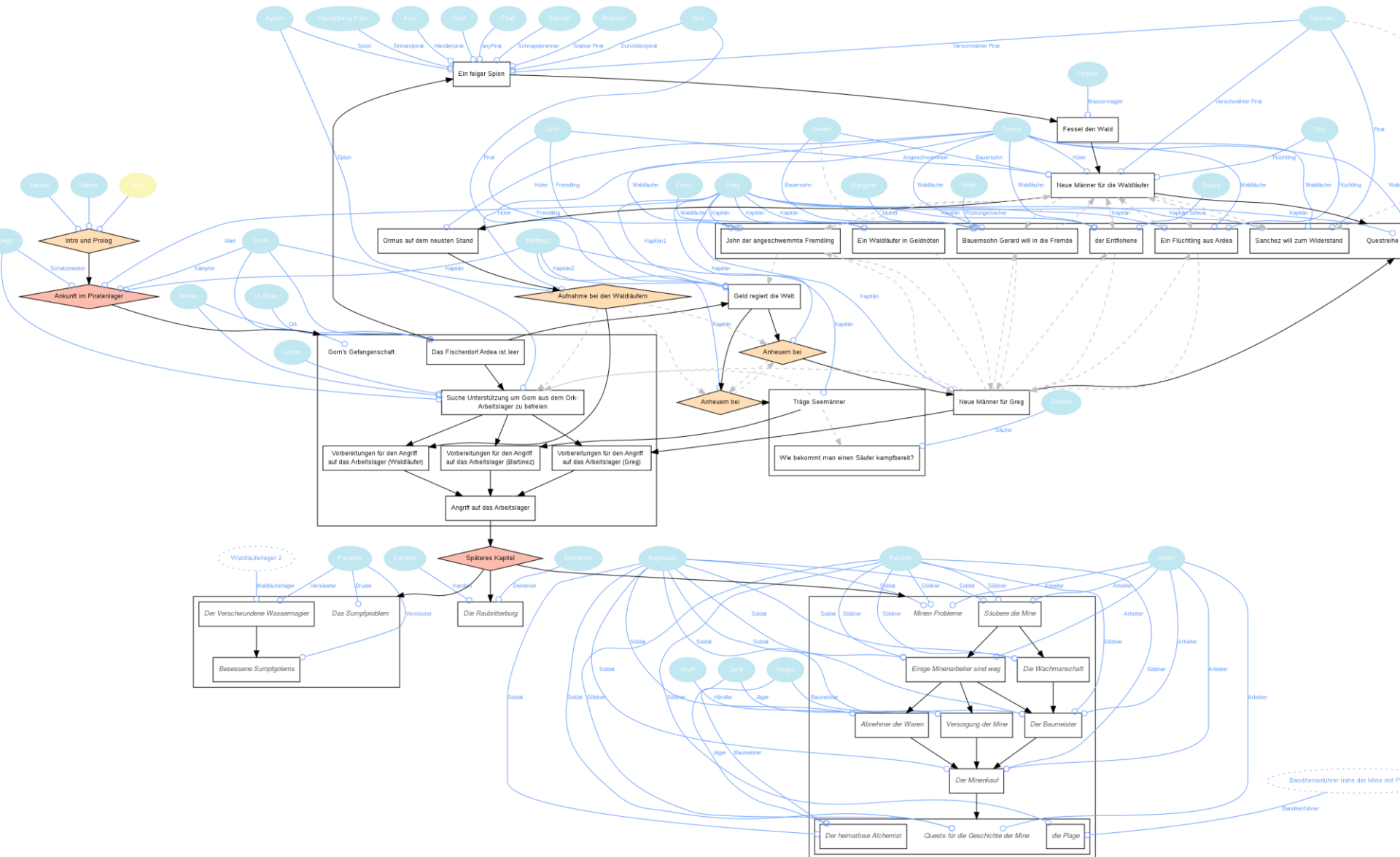


# SemEx in RPG-Dev-Wiki (2)

In RPG-Dev-Wiki, “Quests” follow a special concept of defining “Roles”. A role can be taken by a NPC, a Location or an Item. (Roles are special properties, prefixed with “R:”)



## Examples for Quest roles and Quest relations



# SemEx: Development

- Originally implemented as simple template:?  
(about 50 lines of code)
- Now, proper extension in experimental state  
(about 5,000+ lines of code)
  - Requires MW 1.20 and SMW 1.7 or 1.8
  - Requires Jeroen De Dauw's Validator extension
  - Offers many advanced features...

# SemEx: Advanced features (1)

- Nested syntax, allows:

```
<?Name :: <?Capital City>>
```

(2) Will ask for the “Name”  
property of the inner query’s  
result

(1) Will ask for the  
“capital city” property  
of the current article.  
(Should be a reference  
and single-valued)

# SemEx: Advanced features (1)

- Nested syntax, allows:

`<?Name::<?Capital City>>`

Apparently  
not required  
in SemEx

Equivalent to:

```
{ {#show:
  { {#show: { {PAGE_NAME}} | ?Capital City | link=none } }
  | ?Name
} }
```

# SemEx: Advanced features (1)

- Nested syntax, allows:

`<?Name::<?Capital City>>`

- Can go as deep as you want, e.g.

`<?Name::<?Vather::<?Vather::Someone>>>`

- Or alternatively:

`<?Name::Vather::Vather::Someone>`

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- Or alternatively:

`<?Name::Vather::Vather::Someone>`

*Could look like:*

`<Vather of <Vather of <Vather of Someone>>>`

`<Vather of <Vather of John F. Kennedy>>`

`<Vather of Joseph P. Kennedy >`

# SemEx: Advanced features (2)

Each successful short query can display additional information in tooltips

Caldera liefert als größte Stadt des Reiches die beste A

**Name of Caldera**

Caldera	
<b>Liegt in :</b>	< <u>Name</u> of Hauptstadt >
<b>Lage :</b>	Weit südlich
<b>Einwohner :</b>	Menschen (7000)
<b>Tiere &amp; Monster :</b>	Nur Kanaratten
<b>Für Spieler betretbar :</b>	Ja

This will be configurable, so it will be possible to display fact-boxes or other information from the queries target page or via the API.



# SemEx: Advanced features (3)

- Parser function `{{?:}}` for using short queries in templates or in case a new syntax is considered undesirable.
  - Template version with some additional parameters
- `<?!...>` and `{{?!:...}}` which work just as `<?...>` but won't print any “expressive result” in case the query fails
- `{{?to?!:...}}` parser function for making templates compatible with `<?...>`
  - Replaces all “expressive results” with their plain value or no value
- Early defined properties could be queried even before sent to the store (experimental).

# SemEx: Future Plans

- First stable release
- Putting more thought into some features
  - `<?...>` Syntax
  - `?to?!` parser function
  - Accessing incomplete store in short queries
  - Grammatical issues of `<?...>` in running text
- New special properties for property definitions.  
E.g. for defining that a property should be single valued.

<?questions> ?

# {{#ask:...}}

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